

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1-10. (Cancelled)

11. (Amended) A method for predicting the likelihood that an individual will be diagnosed with a bipolar disorder, comprising ~~the steps of:~~

- a) ~~obtaining a DNA sample from an individual to be assessed; and~~
- b) determining the nucleotide present at nucleotide position 31 of brain-derived neurotrophic factor gene, as numbered in SEQ ID NO: 1, in a DNA sample from an individual to be assessed,

wherein the presence of a "T" at position 31 indicates that the individual has a reduced likelihood of being diagnosed with a bipolar disorder as compared with an individual having an "A" at that position.

12. (Original) A method according to Claim 11, wherein the individual is an individual at risk for development of a bipolar disorder.

13. (Amended) A method according to Claim 11, wherein the nucleotide at position 31 is determined by single-base extension using a primer capable of hybridizing to SEQ ID NO: 1, its complement or portions thereof, such that ~~a nucleotide corresponding to~~ nucleotide 31 of SEQ ID NO: 1 is immediately adjacent to the 3' terminus of said primer.

14. (Amended) A method according to Claim ~~13~~ 11, wherein the nucleotide at position 31 is determined by ascertaining the nucleotide at position 858 by single-base extension using a primer ~~the primer that~~ comprises SEQ ID NO: 3 or its complement.

15. (Original) A method according to Claim 13, wherein the primer is immobilized on a solid support.

16. (Amended) A method for predicting the likelihood that an individual will be diagnosed with a bipolar disorder, comprising ~~the steps of:~~

- ~~a) obtaining a DNA sample from an individual to be assessed; and~~
- b) determining the nucleotide present at nucleotide position 31 of brain-derived neurotrophic factor gene, as numbered in SEQ ID NO: 1, in a DNA sample from an individual to be assessed,

wherein the presence of a “A” at position 31 indicates that the individual has an increased likelihood of being diagnosed with a bipolar disorder as compared with an individual having an “T” at that position.

17. (Original) A method according to Claim 16, wherein the individual exhibits clinical symptoms of mania or mania and depression.

18. (Original) A method according to Claim 16, wherein the individual is an individual at risk for development of a bipolar disorder.

19. (Amended) A method according to Claim 16, wherein the nucleotide at position 31 is determined by single-base extension using a primer capable of hybridizing to SEQ ID NO: 1, its complement or portions thereof, such that ~~a nucleotide corresponding to~~ nucleotide 31 of SEQ ID NO: 1 is immediately adjacent to the 3' terminus of said primer.

20. (Amended) A method according to Claim ~~19~~ 16, wherein the nucleotide at position 31 is determined by ascertaining the nucleotide at position 858 by single-base extension using a primer ~~the primer that~~ comprises SEQ ID NO: 3 or its complement.

21. (Original) A method according to Claim 19, wherein the primer is immobilized on a solid support.

22-23. (Cancelled)

24. (New) A method according to Claim 14, wherein the primer is immobilized on a solid support.

25. (New) A method according to Claim 20, wherein the primer is immobilized on a solid support.